

## Broader Stem Cell Research Backed

Key Science Group Differs With Bush

By Rick Weiss  
Washington Post Staff Writer  
Tuesday, September 11, 2001; Page A01

Research on human embryonic stem cells deserves generous funding by the federal government and will not live up to its therapeutic potential if the work is restricted to a small number of cells from a limited number of embryos, according to a report to be released today by the National Academy of Sciences.

Moreover, scientists should be allowed to pursue research that involves the cloning of human embryos because cells derived from such embryos may prove to be especially useful for the treatment of many degenerative conditions, the report concludes.

The report by the academy, an independent organization chartered by Congress to advise the government on science issues, comes one month after President Bush announced his policy regarding federal funding of human embryo cell research. Although the report rarely addresses the new Bush standards directly, its recommendations differ significantly from the president's policy and are sure to escalate the already heated debate as the Senate holds hearings on the topic.

Bush announced on Aug. 9 that he would allow federal funding only for research on the approximately 64 colonies of embryo cells that had been created by that date, saying he did not want taxpayer dollars to support further destruction of human embryos. But the academy report emphasizes that embryonic stem cells tend to accumulate mutations the longer they live in laboratory dishes -- a process it says will gradually render them less useful both as research tools and as treatments for disease.

Moreover, the report notes, new cell colonies, or "lines," almost certainly will have to be produced if the cells are to be transplanted in human patients as doctors hope, since the current lines have been grown in mixtures with animal cells that could pose risks to patients.

"We . . . believe that new embryonic stem cell lines will need to be developed in the long run to replace existing lines that become compromised by age, and to address concerns about culture with animal cells and serum that could result in health risks for humans," said Bert Vogelstein, a professor of medicine at Johns Hopkins University and chairman of the National Academy of Sciences committee that has been working on the report for several months.

Some groups oppose federal funding of stem cell research because human embryos must be destroyed to retrieve the cells, which have the capacity to grow into virtually every kind of tissue and which may one day be grown into replacement tissues for people with a range of ailments. Supporters of the work note that the cells are taken from embryos already destined to be destroyed at fertility clinics.

The administration has come under criticism in recent weeks as it became clear that most of the 64 stem cell lines it had said met the president's criteria for federally supported research are not yet available for distribution to scientists and do not meet the standard scientific definition of "stem cells."

The administration has countered such criticisms of its policy by saying that additional work on embryonic stem cells is still legal in the private sector. But the academy report plays down that option, noting that private companies are not likely to invest large sums in research that is still far from profitable application. The report also expresses concern about the relative lack of ethics oversight in the private sector, saying that public funding "provides the most efficient and responsible means to fulfill the promise of stem cells for achieving medical breakthroughs."

The White House last night defended Bush's policy. "The president's policy solution allows for a tremendous amount of scientific research to be conducted, and we all hope it holds the promise of cures for people who are suffering," White House spokesman Ken Lisaius said. He said the president "took a very principled approach to a complex issue, a solution that took into consideration both the ethical and

scientific aspects of stem cell research."

In another area of apparent disagreement with the White House, the academy report finds that human embryo cloning is one of several especially promising approaches to ensuring that whatever cures arise from stem cell research will be accepted by patients' bodies and not rejected as foreign tissues. Bush strongly opposes cloning of human embryos for research, a process that involves the creation of embryos from single adult cells. The administration is backing legislation, which has already passed the House, that would ban human embryo cloning even by privately funded scientists in the United States.

In addition, the new report recommends that the federal government create a strict system of scientific and ethical review for proposals that request federal funds for stem cell research. Instead, Bush has decided that such studies may generally go forward as long as they fulfill four basic and -- so far, at least -- vaguely defined ethics criteria that are looser than those proposed last year by President Bill Clinton.

The report also calls for the creation of an oversight body whose members would include experts in science, ethics, theology and law to keep tabs on the field of embryonic stem cell research. Bush has said that he plans to constitute such a group, but it remains unclear whether it would have any of the oversight powers that the academy suggests it should have.

All the president has said about that commission so far is that it will be led by University of Chicago physician and ethicist Leon Kass, one of the people who advised the president while he was formulating his policy decision this summer.

The new 59-page report, "Stem Cells and the Future of Regenerative Medicine," was created by the National Research Council and the Institute of Medicine, arms of the National Academy of Sciences, which decided to prepare a report last winter amid growing controversy over the nascent but promising field. The report was embargoed for release at 11 a.m. today, but the embargo was broken last night in early editions of today's New York Times.

© 2001 The Washington Post Company